

FY-2006 2007 PROPOSED SCOPE OF WORK for:
Operation and Maintenance of Gages

Project #: 8

Lead Agency: U.S. Fish and Wildlife Service

Submitted by: Division of Water Resources
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3/17/06

<u>Category:</u>	<u>Expected Funding Source:</u>
<input checked="" type="checkbox"/> Ongoing project	<input type="checkbox"/> Annual funds
<input type="checkbox"/> Ongoing-revised project	<input type="checkbox"/> Capital funds
<input type="checkbox"/> Requested new project	<input checked="" type="checkbox"/> O&M funds
<input type="checkbox"/> Unsolicited proposal	<input checked="" type="checkbox"/> Other

I. Title of Proposal: Operation and Maintenance of Gages Important to the Recovery Implementation Program.

II. Relationship to RIPRAP:

<u>Task #</u>	<u>Task Description</u>
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Colorado River Action Plan

I.A.3.c.(3)(a) Deliver Ruedi flows to the 15-Mile Reach.

Green River Action Plan

I.A.3 Deliver identified flows

Yampa River Action Plan

I.A.4a.(1) Steamboat Lake Lease delivery flows

I.A.4a.(3)(e) Install and/or operate gages

Duchesne River Action Plan

I.C. Legally protect and deliver identified flows.

I.D. Coordinate reservoir operation

I.F. Determine the need and feasibility of additional gaging.

III. Study Background/Rationale and Hypotheses:

Over the years, the Recovery Program has identified a need to expand flow gaging in the basin to support development of flow recommendations, quantify sediment movement, and administer water secured for endangered fish. This Scope of work consolidates the Recovery Program gaging program and identifies the contributions of cooperating agencies. Cooperators are the Colorado Division of Wildlife, Colorado River Water Conservation District Utah Department of natural Resources and the Central Utah Water Conservancy District. Gages are funded with Program O&M funds that are passed

through to cooperating agencies.

IV. Study Goals, Objectives, End Products:

Provide a basis for refining the flow recommendations for the important stream reaches of the Colorado, Yampa, Price and Duchesne Rivers.

Provide a benchmark for future monitoring by video or aerial photography.

Aid in scheduling releases from Ruedi, Wolford Williams Fork and Green Mountain Reservoirs and other water sources which may be acquired by the Recovery Program.

Provide basic information for sediment modeling for the Little Snake and Yampa Rivers.

Upgrade gaging to provide reliable system for monitoring flows along the lower Duchesne River.

V. Study Area:

Colorado, Green, Yampa, and Duchesne Rivers.

VI. Study Methods/Approach:

The Recovery Program will work with cooperators to contract with for the operation of gages important to the Recovery Program.

VII. Task Description and Schedule:

- A. Operate and maintain the Palisade (15-Mile Reach) gage installed in FY-90 by the Recovery Program.
- B. Operate and maintain the two gages installed on the Yampa River installed in FY-97 by the Recovery Program. Recent funding shortfalls have resulted in the Recovery Program funding 1/4 of the cost of the Craig gage on the Yampa River. The gage is needed to identify flow levels which are set forth in Craig III Biological Opinion, and in the future will be needed to monitor releases from an enlarged Elkhead Reservoir.
- C. Operate and maintain the gages installed on the Duchesne and Uinta Rivers installed in FY-97 by the Central Utah Water Conservancy District. The Recovery Program will cost-share in the operation of this gage.
- D. Operate and maintain the temperature equipment installed on the Duchesne and Uinta Rivers installed in FY-97 by the Central Utah Water Conservancy District. The Recovery Program will cost-share in the operation of this gage.
- E. Operate and maintain the temperature equipment installed on the Jensen Utah gage

installed in FY-98 for the Recovery Program. The Recovery Program will cost-share in the operation of this gage.

- F. Operate and maintain the gage installed on the Price River during the summer of 2000. The gage was requested by the Biology Committee. River stage/flow and temperature will be collected. The Recovery Program will cost-share in the operation of this gage.

Study Schedule: Operation begins October 1, of each year, and continues through September 30, of the following year. Real time provisional data is available on the web at <http://waterdata.usgs.gov/co/nwis/current/?type=flow> The data is published in March of each year and is available in USGS annual water resource data reports. Historic data is also available on the web but usually lags two years because of quality assurance procedures and the volume of data which must be processed by USGS. The temperature for Lodore, Jensen and Deerlodge is available at:
http://waterdata.usgs.gov/nwis/uv?multiple_site_no=404417108524900%0D%0A09260050%0D%0A09261000&search_site_no_match_type=exact&index_pmcode_00010=5&index_pmcode_82292

VIII. FY-2006 Work
 – Budget FY- 2006:

FY- 2006 Budget Estimate	Total	UCRIP	USGS	CWC B/SE O
Williams Fork Creek near Craig	\$8,000	\$6,800		\$0 \$2,000
Yampa and Lodore Temperature	\$7,460	\$7,460		\$0
Yampa River Near Craig	\$3,500	\$1,840	\$1,660	
Colorado River Near Palisade	\$14,000	\$14,000		\$0
Yampa River Above Elkhead Creek	\$14,000	\$14,000		\$0
Yampa River Below Little Snake	\$0	\$0	\$14,000	
Green River near Jensen (DCP & Temp)	\$4,550	\$2,275	\$2,275	
Duchesne River near Randlett	\$13,500	\$6,750	\$6,750	
Duchesne River above Randlett	\$13,500	\$6,750	\$6,750	
Uinta River at Randlett	\$13,500	\$6,750	\$6,750	
Duchesne River near Randlett (Temp)	\$4,400	\$2,200	\$2,200	
Price River Flow and (Temp)	\$17,600	\$8,800	\$8,800	
Duchesne R. at Myton	\$13,500	\$6,750	\$6,750	
TOTAL:	\$127,510	\$84,375	\$49,185	

*Note: for FY 2006

(Of the \$84,375 UCRIP total, \$44,100 goes to Colorado River Water Conservation District and \$40,275 goes to Central Utah Water Conservation District)

Gage Operational Cost FY 2006								
Cost Category	Cost/Day	Days						
Overhead (1)			\$3,200					
Salaries GS 12 (2)	\$286	22	\$6,300					
Science Support GS 9 (3)	\$275	10	\$2,750					
Travel 1950 mi@.41/mi	\$800		\$800					
Equipment,			\$500					
Miscellaneous			\$50					
Total			\$13,600					
Note 1	Facilities, national and local administration support							
Note 2	Work in all categories of gage operation including repair, and data collection and review							
Note 3	Technical support, QA/QC, data management/archiving, data base and IT support, publication							

Budget FY- 2007:

FY- 2007 Budget Estimate Based upon a 3% increase	Total	UCRIP	USGS	CWCB/SEO
Williams Fork Creek near Craig	\$8,240	\$7,004	0.00	2200
Yampa and Lodore Temperature	\$7,684	\$7,683	0.00	
Yampa River Near Craig	\$ 3,605	\$1,895	\$1,709	
Colorado River Near Palisade	\$14,420	\$14,420	0.00	
Yampa River Above Elkhead Creek	\$14,420	\$14,420	0.00	
Yampa River Below Little Snake	\$0.00	\$0.00	\$14,420	
Green River near Jensen (DCP & Temp)	\$4,687	\$2,343	\$2,343	
Duchesne River near Randlett	\$13,905	\$6,952	\$ 6,952	
Duchesne River above Randlett	\$13,905	\$6,952	\$6,952	
Uinta River at Randlett	\$13,905	\$6,952	\$6,952	
Duchesne River near Randlett (Temp)	\$4,532	\$2,266	\$2,266	
Price River Flow and (Temp)	\$18,128	\$9,064	\$9,064	
Duchesne R. at Myton	<u>\$13,905</u>	<u>\$6,952</u>	<u>\$6,952</u>	
TOTAL:	\$131,335	\$86,906	\$50,660	

*Note: for FY 2007

(Of the \$86,906 UCRIP total, \$45,423 goes to Colorado River Water Conservation District and \$41,483 goes to Central Utah Water Conservation District)

IX. Budget Summary:

FY- 2006 \$ 84,375
FY- 2007 \$ 86,906